## Argument Against the California Labor Federation's Petition to the California Standards Board to Adopt A Revised Ergonomics Standard.

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The ergonomics community is far from knowing the precise combination or level of ergonomic risk factors that result in Repetitive Motion Injuries (RMIs). Consequently, there is no available method to develop or determine a dose response relationship with specific risk factors.

Also, there is disagreement within the ergonomics community on specific solutions. An ergonomics solution at one company may be problematic at another company, even if they are in the same industry. There is no universal ergonomic solution throughout industry that effectively eliminates injuries from occurring.

In addition, the term "ergonomic" is highly misused. Many so-called ergonomic tools and equipment are poorly designed or not applicable to certain specific workplace conditions. There is no authority in place to stamp "a seal of approval" on ergonomic products. The only internationally recognized ergonomics authority in the U.S. is the Board of Certification in Professional Ergonomics (BCPE). And the BCPE will never place a seal of approval on any product due to the lack of a universal, silver bullet solution.

The California Labor Federation's (CLF's) proposal to eliminate the trigger level is concerning since the two-person trigger level provides validity and assurance to the employer that ergonomics intervention is required. The two-person trigger assures the employer that at least two employees performing the identical work activities were objectively identified and diagnosed by licensed physicians.

There are many factors associated with RMIs: biological, ergonomic, and sociological. Figure 1 illustrates the multifactorial nature of the average injury.

For each biological, ergonomics, and sociological component, there are numerous personal, physical, and personal psychological factors involved in each injury. Since each employee is unique, each soft tissue injury is unique.

Simply stated, the model presented in Figure 1 shows that ergonomics represents just one of the three primary factors that lead to the injury. There is a multifactorial influence and an unclear interaction of variables that lead to each unique injury.

RMIs are soft-tissue injuries that primarily occur at the upper extremities. RMIs occur over time (one week, one month, even years). RMIs are subjective in nature. There is no visual indication to verify the injury, only subjective symptoms.

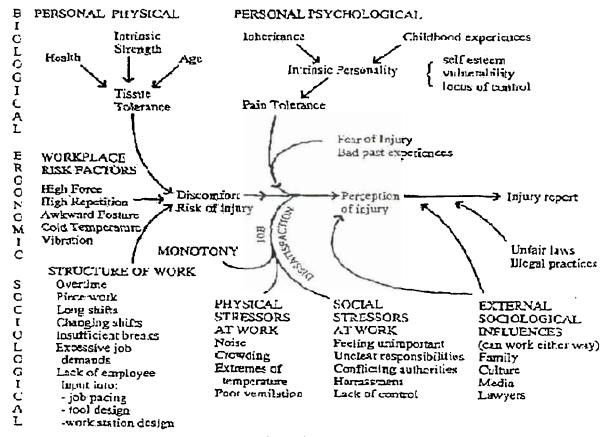


Figure 1: Multifactorial Nature of Injuries

Source: Ranney D: Chronic musculosketal injuries in the workplace, Philadelphia, PA, Saunders, 1996.

Given the chronic nature of RMIs, the symptomatic patient frequently cannot pinpoint the specific cause of the RMI. The patient meets with the licensed physician, provides a quick history of the symptoms and potential causes, and a cause might be immediately identified. This cause is identified without the physician's adequate knowledge of specific workplace. In essence, an educated guess is made to pinpoint the cause of the RMI based on the patient's input.

This scenario is usual for any chronic injury or illness. Identifying the specific cause of an injury or illness during a short visit to the doctor is a daunting task.

Creating a blanket regulation trigger based on zero RMIs or one unique soft tissue injury is unjustified. The two-employee trigger provides a more substantive and statistically valid interaction level.

The CLF proposal to eliminate the "additional unreasonable costs" verbiage is troublesome. Companies make financial decisions everyday on all matters in terms of return on investment. Potential ergonomics strategies are also decided based on their returns on investment.

More than ever, companies are benchmarking their claims data, determining locations, departments, and operations that contribute mostly to their injury costs, and prioritize their safety

and ergonomics allocations on these specific business units using return on investment calculations.

Removing the unreasonable cost justification clause can reduce the effectiveness of a company's safety and ergonomics efforts. By shifting a company's primary focus to one or two RSI workplace conditions, the process of eliminating or minimizing the most hazardous and costly workplace hazards can be ignored or delayed.

Some potential solutions to workplace ergonomic hazards can be extremely costly. This is especially the case in the construction industry. Jobs change hour to hour and day to day. The physical workplace location is not constant. The worker's immediate space, terrain, elevation, angle, and posture are in constant change. Specific ergonomic solutions are not applicable to all of these workplaces.

The CLF documents state that "the current standard...clearly is not working." With the hugely increasing insurance costs, companies are focused more than ever to reduce their workers compensation claims. By reducing their claims costs, companies can be more profitable, more competitive, and achieve improvements in production, quality, and safety. More and more companies have learned this. They have been implementing effective ergonomics measures for years.

In fact, the Bureau of Labor Statistics recently reported that injury rates have decreased (see Table 1). A total of 5.7 million injuries and illnesses were reported in private industry workplaces during 2000, resulting in a rate of 6.1 cases per 100 equivalent full-time workers, according to the Bureau of Labor Statistics, U.S. Department of Labor. The rate for 2000 was the lowest since the Bureau began reporting this information in the early 1970s.

•	1995	1996	1997	1998	1999	2000
Private industry	8.1	• •	7.1	6.7	6.3	6.1
Goods-producing	11.2		9.9	9.3	8.9	8 6
Service-producing	6.7		5.9	5.6	5.3	5.1

Table 1: BLS Statistics on Injury Rates

In both 1999 and 2000, disorders associated with repeated trauma, such as carpal tunnel syndrome and noise- induced hearing loss, accounted for 4 percent of the total workplace injuries and illnesses. The data show that RSIs have at worst stabilized.

Thank You.